CLAIMS

1. A configurable connectorized system comprising:

(a) a module including

(i) a first connector apparatus including a first plurality of connectors for connecting a first plurality of cables between said module and a first plurality of devices; and

(ii) directing apparatus responsive to an input signal from a control apparatus for causing said module to place any of a plurality of signals on any of a plurality of connector pins of said first plurality of connectors.

2. A system as recited in claim 1 wherein said module further includes a second connector apparatus for connecting a cable between said module and said control apparatus.

3. A system as recited in claim 1 wherein said module further includes an internal signal source and said directing apparatus is further programmable to connect a signal from said internal signal source to a said connector pin.

4. A system as recited in claim 1 wherein said directing apparatus includes a plurality of distribution networks with each distribution network having a plurality of selectable paths leading to a particular said connector pin of said first connector apparatus, with each path for connecting a selected one of a plurality of signal types with a selected said connector pin.

5. A system as recited in claim 4 wherein said paths in each said distribution network include

(a) at least one first path selectable for connection of operational power to said selected connector pin;

(b) at least one second path selectable for connection of a digital signal to said selected connector pin;

(c) at least one third path selectable for connection of a power supply return to said selected connector pin.

6. A system as recited in claim 4 wherein said paths include at least one path having a digital to analog converter.

7. A system as recited in claim 4 wherein said paths include at least one path having an analog to digital converter.

8. A system as recited in claim 1 wherein said directing apparatus is programmable to direct said module to output a first signal to said controller wherein said first signal conveys data content of a signal input to said module to a selected one of said connector pins of said first connector apparatus from a corresponding said device.

9. A system as recited in claim 1 wherein said module includes a digital to analog converter and said directing apparatus is programmable to direct reception of a digital signal from said controller and cause said signal to be converted by said digital to analog converter to an analog signal, and to place a copy of said analog signal on any selected one of said connector pins.

10. A system as recited in claim 1 wherein said module includes an analog to digital converter and said directing apparatus is programmable to detect an analog signal on any selected contact of said first connector apparatus and cause said analog to digital converter to convert said signal to a digital signal and output a copy of said digital signal to said controller.

11. A system as recited in claim 1 wherein said directing apparatus is programmable to cause a power supply voltage to be connected to a first selected connector pin of said first connector apparatus, and to cause a power supply return to be connected to a second selected connector pin of said first connector apparatus.

12. A system as recited in claim 1 wherein said directing apparatus includes a microprocessor.

13. A system as recited in claim 12 wherein said module includes a power supply for providing said supply voltage.

14. A control system comprising:

(a) at least one device to be controlled;

(b) a system controller for directing operation of said at least one device;

(c) a first cable apparatus including a first cable for connection of a first end to said system controller;

(d) a second cable apparatus including a second cable for each said device with each said second cable having a first end for connection to a corresponding said at least one device; and

(e) a first module including

(i) a first connector for connecting to a second end of said first cable;

(ii) a second connector for connecting to each second end of each said second cable; and

(iii) directing apparatus responsive to direction from said controller for directing transmission of any one of a plurality of signal types between said module and a selected said device through a selected one of a plurality of contacts on a corresponding said second connector, and for directing transmission of a said signal between said controller and said first module.

15. A configurable connectorized cable testing system comprising:

(a) A first module including

(i) a first connector for connecting to one end of a cable to be tested;

(ii) a second connector for connecting to one end of a cable for connecting to a first computer apparatus;

(iii) first directing apparatus responsive to a command signal from said computer apparatus for applying one of a plurality of signals generated within said first module to a selected contact of said first connector for transmission through said cable to be tested;

(b) a second module including

(i) a third connector for connecting to a second end of said cable to be tested;

(ii) a fourth connector for connection of a cable for connecting to said first computer apparatus;

(iii) second directing apparatus responsive to a command signal from said computer apparatus for sensing any signal on a contact of said third connector and sending corresponding data to said first computer apparatus through said cable for connecting to said first computer apparatus for verifying an operational condition of said cable to be tested.

16. A system as recited in claim 1 wherein said plurality of signal types includes frequency information.

17. A system as recited in claim 16 wherein said frequency information represents serial communication.

18. A system as recited in claim 16 wherein said frequency information is feedback information from a servo motor.